

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An image capture and processing integrated circuit comprising:
  - an image sensor including a plurality of sensor columns;
  - a plurality of analogue-to-digital converters (ADC's) that are connected to the image sensor to convert analogue signals generated by the image sensor into digital signals;
  - image processing circuitry that is connected to the ADC's to carry out image processing operations on the digital signals; and
    - a print head interface that is connected to the image processing circuitry to receive data from the image processing circuitry and to format that data for a printhead; and
      - a plurality of analog signal processors, wherein each analog signal processor is dedicated to process one or more signals generated by a respective one of the plurality of sensor columns;
      - wherein the integrated circuit defines a CMOS active pixel sensor array, and wherein the integrated circuit incorporates a plurality of analog signal processors that are configured to carry out enhancement processes on analog signals generated by the active pixel sensor array.
2. (Currently Amended) An image capture and processing integrated circuit as claimed in claim 1, which includes a memory device that is interposed between the image sensor integrated circuit and the image processing circuitry to store data relating to an image sensed by the image sensor integrated circuit.
3. – 4. (Canceled)
5. (Previously Presented) An image capture and processing integrated circuit as claimed in claim 1, in which the image processing circuitry includes color interpolation circuitry to interpolate pixel data.
6. (Previously Presented) An image capture and processing integrated circuit as claimed in claim 1, in which the image processing circuitry includes convolver circuitry that is configured to apply a convolution process to the image data.
7. (Previously Presented) An image capture and processing integrated circuit as claimed in claim 1, in which the print head interface is configured to format the data correctly for a pagewidth printhead.

8. (Previously Presented) An image capture and processing integrated circuit as claimed in claim 1, which is a single integrated circuit.

9. (Currently Amended) A camera system which includes ~~an—the~~ image capture and processing integrated circuit as claimed in claim 1.